

Response to the Call for Evidence by the  
House of Commons Select Committee on Science and Technology

Brexit, Science and Innovation: Preparations for 'No-Deal'

Compiled on behalf of the UK Computing Research Committee, UKCRC.

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UKCRC is an Expert Panel of the British Computer Society (BCS), the Institution of Engineering and Technology (IET), and the Council of Professors and Heads of Computing (CPHC). It was formed in November 2000 as a policy committee for computing research in the UK. Members of UKCRC are leading computing researchers who each have an established international reputation in computing. Our response thus covers UK research in computing, which is internationally strong and vigorous, and a major national asset. This response has been prepared after a widespread consultation amongst the membership of UKCRC and, as such, is an independent response on behalf of UKCRC and does not necessarily reflect the official opinion or position of the BCS or the IET.

Response

Q1. What a No Deal Brexit would mean for the science and innovation community;

[1] Computing underpins Science – providing instrumentation, automation, data, analysis, publishing and more. It is arguably the most international of disciplines, in the sense that the Internet and communications generally connects everybody regardless of geography. Hardware is designed and manufactured all over the world and has to work when integrated. In consequence, the potential disruption created by a 'no deal' Brexit threatens our ability not only to remain competitive within Computing Science research but also to support a far wider range of engineering and scientific endeavours;

[2] The last decade has seen a rapid expansion in the scope of Computing Science research; with new core technologies being explored from Quantum through to AI and Data Science. While the UK remains at the forefront of many of these areas, we can only maintain this position through the free flow of ideas and people. We recognise that a 'no deal' Brexit will, at best, create a profound short-term disruption to these exchanges. We have a strong concern that without any detailed strategy to recover these connections, the core relationships that underpin research excellence will be hard to resurrect even if the UK can match existing levels of EU funding;

[3] As mentioned in [1], Computing relies on interoperability, which in turn, depends both on technical innovation and also on standardisation. Under a managed Brexit, it is likely that UK Computing researchers will negotiate continued representation on standardisation committees from which they will be summarily excluded under 'no deal' scenarios. This is likely to reduce the influence of UK Computing research. It will also have an impact on the innovation pipeline where the outcome of research has to align with a Digital Single Market over which we will have almost no influence;

[4] There are many areas in which the UK relies on international cooperation not only to drive innovation in Science and Engineering but also to face common threats. A 'no deal' Brexit is likely to curtail cooperation on the exchange of information about cyber security concerns and the exchange of best practice; for example, under the NID Directive. UK research relies on these sources to develop and then validate future defences. If this link is cut then we may remain exposed to threats that have been identified and mitigated by our former colleagues;

Q2. The adequacy of what the Government and its non-departmental public bodies are doing to prepare for such an outcome.

[5] UKRI has begun to set in place mechanisms to underwrite the UK involvement in the H2020 programme. We acknowledge the benefits of a single point of contact – where Universities have been able to register all of the grants they are involved in without imposing this administrative overhead on individual investigators. However, a 'no deal' Brexit places the recipients of these awards in an invidious position with critical expenditures being made under extreme time pressure without a focus on the underlying scientific or engineering need to ensure that invoices are processed by the end of March. Computing research is particularly vulnerable in this respect with a reliance on a wider array of specialist

computational systems and networks that have to interface with infrastructures being developed across the remaining member states;

[6] Previous evidence to the Committee has reinforced the concerns over the impact of Brexit on the careers and family life of our colleagues from across Europe. The confusion over the 'no deal' scenario has exacerbated these impacts and is further undermining attempts to retain some of the best minds in Europe; especially when Computing Science research relies on close cooperation with companies who are re-locating core areas to the Continent.